

CASE REPORTS

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- ◀ Teratoma of the Ovary in a Sixteen-Month-Old Child
 - ◀ Osteochondritis Dissecans of the Supratrochlear Septum
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Teratoma of the Ovary in a Sixteen-Month-Old Child

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A CASE of teratoma of the ovary in the youngest patient of record to have such a lesion was reported by Garrett² in 1950. The patient was 20 months of age and the presence of the tumor was noted in a routine examination. Up to that time the youngest patient in a reported case of teratoma of the ovary was three years of age. The case was reported by Harris³ in 1917. The youngest patient with this lesion reported by Ladd and Gross⁴ was six years of age. In the British literature¹ there are reports of cases at the age of four and six years. Also reported was twisted ovarian cyst in a two-year-old child, but without final pathological diagnosis.

Tumors of the ovaries in children can occur at any age, but are most common between the ages of 10 and 15 years. In the case here reported the patient was 16 months of age.

CASE REPORT

A 16-month-old white female was admitted to the pediatric service of Mount Zion Hospital August 7, 1949, because of abdominal pain of 24 hours' duration. From the history obtained from the mother it appeared that the child had been well until the afternoon of the day before entry, when she was noted to be drowsy and lethargic. About 9 p.m. the child cried and vomited. Upon examination by a physician a tender mass filling the right side of the abdomen was palpated. The child did not appear acutely ill. An enema was given. The fluid subsequently discharged contained no feces and there was no evidence of blood.

The next morning the child appeared to feel well. She ate and retained her usual breakfast. By early afternoon she was fretful and had a temperature (rectal) of 103° F. She was then admitted to the hospital.

When examined upon admission the patient did not appear to be acutely ill. The rectal temperature was 103.6° F. The pulse rate was 90 per minute. A firm, tender mass, dull to percussion, filled the entire right side of the abdomen and extended up into the epigastrium. No abnormality was noted in a rectal examination.

In x-ray films of the abdomen a mass in the right side, displacing the bowel to the left, was observed, and there was moderate distention of the small bowel. In barium enema studies the cecum was not visualized, but there was a small amount of gas in the cecum and ascending colon, which were displaced to the left by the mass. The films were suggestive of intra-abdominal fluid on the right side, and an irregular density resembling calcification was present in the upper part of the mass.

Leukocytes in the blood numbered 14,600 per cu. mm.—64 per cent polymorphonuclear cells, 2 per cent monocytes, and 34 per cent lymphocytes; 18 per cent of the total were non-filamented forms. The hemoglobin content of the blood was 12 gm. per 100 cc. The urine was normal except for a trace of acetone.

Exploratory laparotomy was carried out through a long right rectus incision. A 9.5x8x8 cm. red-purple cystic tumor with several hard nodular areas filled the right side of the abdomen, and the bowel was pushed to the left. The tumor grew from the right ovary, and the pedicle and the fallopian tube were twisted 180° counterclockwise, strangulating the tumor and the tube. The tube appeared gangrenous. After the pedicle and tube had been untwisted, it was felt necessary to remove the tube and the mass together.

The postoperative course was uneventful and the patient was discharged from the hospital on the ninth postoperative day.

PATHOLOGICAL REPORT

Macroscopic examination: The specimen was a lobulated bosselated spheroidal mass 9.5x8x8 cm. The surface was smooth, purplish-grey and slightly dulled. A tube approximately 6 cm. long was stretched out along a pedicle that was 4 cm. long. Sections were extremely cellular with alternating zones of hemorrhage and necrosis. The cellular parts were soft, and varied in color from pink to gray. There were some zones of calcification scattered somewhat irregularly throughout but generally in the capsule. Most of the cystic areas were 2 to 3 cm. in diameter. No invasion of the capsule was observed.

Microscopic examination (See Figure 1): In sections of the capsule of the tumor laminated layers of fibrous tissue separated by a considerable amount of blood were observed. In a section through the pedicle and tube there was a loose fibrous stroma in which there was much blood. This extensive hemorrhage involved the tube, which was otherwise normal. The tumor was adherent to the cyst wall, and at no place in the sections was there evidence of invasion through the wall. In the tumor there was a wide variety of cells, all of them quite adult in configuration and structure. The most common tissue in this teratomatous tumor was brain tissue, represented by a loose formation of glial tissues with large dilated and congested blood vessels and a diffuse scattering of leukocytes and lymphocytes. In some places the tissue was necrotic. Associated with the brain tissue and scattered irregularly throughout were many structures that resembled respiratory tract, particularly trachea. The arrangement of epithelium, smooth muscle, and cartilage was quite striking. There were large cystic zones lined by stratified squamous epithelium, and beneath the epithelium there were epidermal structures including hair follicles and glands. In a few places the respiratory epithelium of the pseudo-tracheal structures

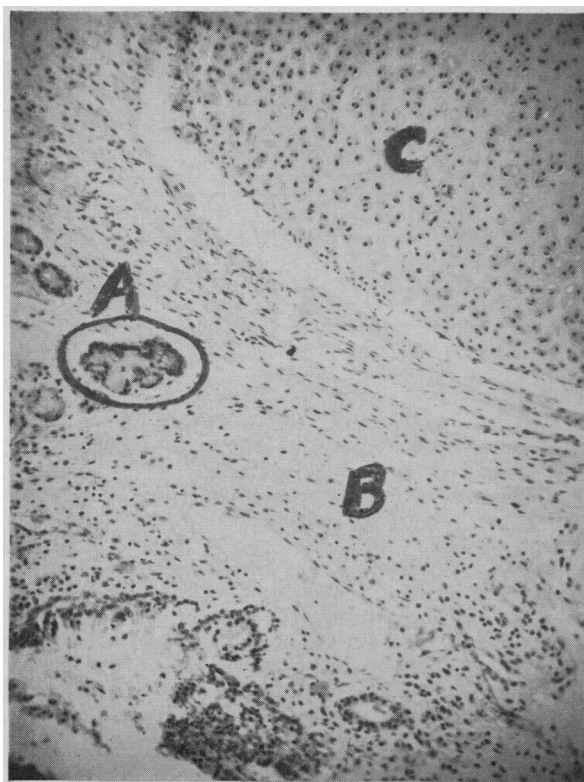


Figure 1.—Section of specimen. A—Primitive respiratory epithelium. B—Nerve tissue, glial in nature. C—Cartilage.

was necrotic and inflamed. In a few regions beneath the stratified squamous epithelium there were zones of fat adjacent to the glial substance. Some poorly formed pulmonary tissue was present. There was no evidence of neoplastic alteration of any of these tissues.

Pathologic diagnosis: Ovarian teratoma composed of adult tissues and showing early acute hemorrhagic necrosis.

DISCUSSION

In this case, rather typical of twisted ovarian cyst, a pre-operative diagnosis of dermoid or teratomatous cyst was made with the aid of x-ray studies. Before the x-ray examination was carried out, a diagnosis of intussusception was considered. Had the fairly common occurrence of twisting of the mass on its pedicle not occurred, the presence of the tumor might have gone unrecognized for many months.

SUMMARY

A case of teratoma of the ovary in a 16-month-old child is reported. The patient is believed to be the youngest of record to have the lesion.

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Osteochondritis Dissecans of the Supratrochlear Septum

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IN the five years since Morton and Crysler¹ first described osteochondritis dissecans of the supratrochlear septum and reported six cases, several additional cases have been reported.^{2, 3, 4}

A review of the reports indicates that the lesion usually occurs in young persons, more often in the knee than in other joints, and that more males than females are affected. It is generally agreed that the lesion starts with trauma which is followed by a necrotic process in which a bony fragment separates beneath articular cartilage.^{1, 3, 4} With regard specifically to such lesions in the olecranon fossa, it is believed by some investigators^{1, 4} that the fragment arises from within the supratrochlear septum. Ross,³ on the other hand, expressed the opinion that the process originates in some other part of the elbow joint and that the fragment, migrating, becomes wedged in the olecranon fossa. Observations in the case here reported seem to support Ross's opinion.

REPORT OF A CASE

A 19-year-old United States Marine injured the right elbow slightly while in Okinawa in January 1947. No specific medical treatment was given. During the next several

months, there was dull aching in the right elbow joint, with restriction of flexion and extension.

Upon physical examination when the patient was first observed in August 1947 at the U. S. Naval Hospital, Guam, the right elbow lacked 20 degrees of full extension and 10 degrees of complete flexion. The patient complained of dull aching within the olecranon fossa. In roentgen studies a sclerotic ovoid free fragment of bone occupying the supratrochlear septum of the right humerus was observed. The fragment, measured in projected dimension, was 10 by 15 mm. in the anterior-posterior film and 15 by 15 mm. in the lateral film. It was apparent that there was interference with full flexion and extension.

On Sept. 8, 1947, arthrotomy of the right elbow joint was carried out. A longitudinal incision three inches in length was made across the posterior lateral aspect of the elbow. The triceps tendon was reflected medially, the elbow joint was entered and the olecranon fossa exposed. A free osteochondritic body 1.5 cm. in diameter was removed. In careful examination of the articular contour of the olecranon fossa, nothing which would indicate the origin of the osteochondritic body was observed. The operative site was irrigated with sterile water and the wound was closed in layers with cotton sutures.